

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Amendment of Part 90 of the Commission’s)	WP Docket No. 16-261
Rules to Improve Access to Private Land)	
Mobile Radio Spectrum)	
)	
Land Mobile Communications Council Petition)	RM-11719
for Rulemaking Regarding Interim Eligibility)	
for 800 MHz Expansion Band and Guard Band)	
Frequencies)	
)	
Petition for Rulemaking Regarding Conditional)	RM-11722
Licensing Authority Above 470 MHz)	
)	

COMMENTS OF M2M SPECTRUM NETWORKS, LLC

M2M Spectrum Networks, LLC (“M2M”) submits these comments in response to the *Notice of Proposed Rulemaking* (“NPRM”) in the above-captioned proceeding.¹

I. INTRODUCTION AND SUMMARY

Through the *NPRM*, the Commission seeks to expand access to private land mobile radio (“PLMR”) spectrum by addressing certain issues that have stalled the release of additional markets for 806-824/851-869 MHz (800 MHz) band licenses. M2M salutes the Commission’s initiative. The Commission should act quickly to release these channels. At the same time, it should not adopt incumbent preferences for the 800 MHz spectrum. While a set-aside may sometimes be warranted to reserve spectrum for competitive companies or new entrants, it is strongly disfavored when in the opposite direction – *i.e.*, to reserve spectrum for incumbents. Such set-asides are inherently bad for competition. The Commission should resist the proposal

¹ Amendment of Part 90 of the Commission’s Rules to Improve Access to Private Land Mobile Radio Spectrum, *Notice of Proposed Rulemaking*, 31 FCC Rcd. 9431 (2016) (“NPRM”).

made by the Land Mobile Communications Council (“LMCC”), which would amend the Commission’s rules to allow certain 800 MHz band incumbent licensees in a market a six-month exclusive window in which to apply for 800 MHz Expansion Band (860-861/815-816 MHz) (“EB”) and Guard Band (861-862/816-817 MHz) (“GB”) (collectively “EB/GB”) frequency licenses before the frequencies are made available to applicants for new systems.² The only justification offered for such a preference is that the incumbents may be able to put the channels to use faster. But since many incumbents appear to rely on inefficient, technically antiquated systems,³ there is no such guarantee of fast or full use in the hands of the same entities responsible for the spectrum’s current low levels of use and antiquated technologies. For the Specialized Mobile Radio (“SMR”) EB,⁴ the Commission is therefore correct in tentatively concluding that no preference should be applied as incumbents and non-incumbents often compete against each other. The same reasoning applies with equal force not only for the General Pool GB frequencies, but also for the Industrial/Business (“I/B”) Pool portion of the EB frequencies.

M2M is the first company to provide comprehensive solutions for creating, connecting, and managing machine-to-machine communications for the Internet of Things (“IoT”). M2M’s applications allow its customers to locate, monitor, and control their assets, take action based on data received, and automate transactions. M2M differentiates itself from its competitors by being the only full-service, one-stop shop, operating its own network (using 800 MHz and other frequencies), with its own device connectors and best-in-class applications, dedicated solely to

² *Id.* at 9440-43 ¶¶ 28-35.

³ *See* Land Mobile Communications Council, Petition for Rulemaking, RM-11719, at 6 (March 27, 2014).

⁴ The EB spectrum is designated mostly for SMR stations, with the remainder for Industrial/Business Pool eligible. *See NPRM*, 31 FCC Rcd. at 9440 ¶ 28.

machine-to-machine communications solutions for the IoT. As a full-service provider, M2M custom tailors its network collectors, device connectors, and applications in ways that will bring whole new categories of M2M solutions to life.

To facilitate these services, M2M needs the Commission to unlock the EB/GB from its current largely fallow state. M2M urges the Commission to act quickly to expand access to PLMR spectrum through the *NPRM* and release additional markets for the EB and GB. These channels have lain unused too long and any further delay will keep innovative companies like M2M from putting the frequencies to use in furtherance of the public interest. The Commission should act swiftly, either through this proceeding, or simply through a Public Notice making the channels available for new applicants.

II. THE COMMISSION SHOULD ACT QUICKLY TO RELEASE ADDITIONAL 800 MHZ EB/GB MARKETS

The 800 MHz EB/GB channels are supposed to be made available for licensing once rebanding in a given market is completed. Once the channels have been cleared in the rebanding process, the Public Safety and Homeland Security Bureau is authorized to release a Public Notice announcing that clearing has been achieved in a particular region and specifying a date for accepting new applications.⁵ Despite completion of the 800 MHz rebanding process in almost every region, however, the process for accepting new applications has stalled and the Commission has not released any new markets for licensing since February 2015.⁶ The latest quarterly report from the Transition Administrator indicates that the rebanding process is

⁵ See Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau Announce the Completion of 800 MHz Band Reconfiguration in Certain NPSPAC Regions, *Public Notice*, 27 FCC Rcd. 14775, 14781-82 (2012).

⁶ See Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau Announce the Completion of 800 MHz Band Reconfiguration in Certain NPSPAC Regions and the Availability of Additional Sprint Vacated Channels, *Public Notice*, 29 FCC Rcd. 16290, 16295-96 (2014).

incomplete in only eight NSPAC regions, mostly along an international border.⁷ This spectrum has been lying unused unnecessarily. The Commission should release these channels as soon as possible, whether through this proceeding or simply through a Public Notice.

III. SOUND SPECTRUM POLICY DISFAVORS INCUMBENT PREFERENCES

Commission spectrum policy generally seeks to “encourage the development and deployment of new, more efficient technologies that will increase the amount of information that can be transmitted in a given amount of bandwidth.”⁸ LMCC’s proposed incumbent preference would run counter to this principled policy by favoring incumbents with legacy technology, stifling new entrants, and delaying spectrum deployment. For many years, the Commission has been moving away from special set-asides such as the one proposed by LMCC.⁹ Occasionally, the Commission has established preferences for limited and specific public interest purposes such as diversifying the universe of licensees, avoiding spectrum warehousing, and promoting new entry. For instance, in the 700 MHz proceeding, the Commission adopted timetables that were favorable to new entrants, recognizing that their needs differed from incumbent providers.¹⁰ The Commission has also crafted rules to make sure that incumbents would not be able to

⁷ See 800 MHz Transition Administrator, Quarterly Progress Report for the Quarter Ended June 30, 2016 at 1, 9 (Oct. 6, 2016), http://www.800ta.org/content/reporting/QPR_06.30.16.pdf.

⁸ Principles for Reallocation of Spectrum to Ensure the Development of Telecommunications Technologies for the New Millennium, *Policy Statement*, 14 FCC Rcd. 19868, 19870 ¶ 7 (1999) (“*Spectrum Policy Statement*”).

⁹ See Public Notice, FCC, Wireless Telecommunications Bureau Seeks Comment on Comment on Nextel Communication, Inc.’s Petition Regarding PCS C and F Block Spectrum, 15 FCC Rcd. 2104, 2126 (2000) (noting that “the Commission has moved away from establishing small business set-asides...”); Access Charge Reform Price Cap, *Fifth Report and Order and Further Notice of Proposed Rulemaking*, 14 FCC Rcd. 14221, 14348 ¶ 256 (1999); Federal-State Joint Board on Universal Service, *Recommended Decision*, 12 FCC Rcd. 87, 267 ¶ 345 (1996) (“We recommend that any competitive bidding system be competitively neutral...”).

¹⁰ Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, *Report and Order*, 22 FCC Rcd. 15289, 15322–33, 15349–50 (2007).

warehouse spectrum to the detriment of new entrants.¹¹ Finally, the Commission has relaxed rules regarding forfeiture, cancellation, and discontinuation of service at times to help new entrants, who were faced with a system that favored incumbent needs.¹² These rules reflect a desire on the Commission's part to encourage competition by ensuring that new entrants are able to enter the market and innovate.

But incumbent preferences are generally disfavored because "it is in the public interest to encourage participation from a wide variety of applicants."¹³ If anything, Commission policy favors spectrum allocation policies that facilitate spectrum assignments to new entrants and non-incumbents on account of the latter's lack of bargaining power.¹⁴ Finally, delays in putting spectrum to use are disfavored as a matter of established Commission spectrum policy.¹⁵ A

¹¹ Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, *Report and Order*, 12 FCC Rcd. 19079, 19103-04 (1997).

¹² Amendment of Parts 1, 21, 73, 74 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Report and Order*, 19 FCC Rcd. 14165, 14254 (2004).

¹³ Amendments of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Fixed Service, *Report and Order*, 10 FCC Rcd. 9589, 9607 ¶ 32 (1995); *see also* Implementation of Section 309(j) of the Communications Act-Competitive Bidding, *Second Report and Order*, 9 FCC Rcd. 2348, 2394 ¶¶ 260-61 (1994); Amendment of Part 22 of the Commission's Rules to Provide for Filing and Processing of Applications for Unserved Areas in the Cellular Service and to Modify Other Cellular Rules, *Notice of Proposed Rulemaking*, 5 FCC Rcd. 1044, 1050 ¶ 35 (1990).

¹⁴ *See Spectrum Policy Statement* at 19868 ¶ 2; Local Competition Provisions in the Telecommunications Act of 1996, *First Report and Order*, 11 FCC Rcd. 15499, 15528 ¶ 55 (1996) ("The inequality of bargaining power between incumbents and new entrants militates in favor of rules that have the effect of equalizing bargaining power [between incumbents and new entrants]."); Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses, *First Report and Order*, 13 FCC Rcd. 15920, 15967 ¶ 189 (1998); Rules for Advanced Wireless Services in the 2000-2020 MHz and 2180-2200 MHz Bands, *Report and Order and Order of Proposed Modification*, 27 FCC Rcd. 16102, 16194 ¶ 244 (2012) (allowing market entry by new entrants increases competition).

¹⁵ *See Land Mobile Radio Service, Memorandum Opinion & Order*, 51 FCC 2d. 945, 955 ¶ 34 (1975) ("the public interest requires that development of cellular systems be carried forward as

preference would further delay non-incumbent access to the EB/GB bands, which have been ready for licensing but lying fallow for several years now.

IV. INCUMBENT PRIORITY IS NOT APPROPRIATE WITH RESPECT TO EB SMR CHANNELS

The *NPRM* tentatively concluded that “incumbent priority is not appropriate with the EB SMR channels.”¹⁶ The Commission has it right. SMR licensees and applicants compete with each other for customers in the commercial wireless marketplace. Thus, both incumbents and new licensees have similar economic motives to use spectrum in a timely manner, with new entrants actually having an even greater interest in deploying greenfield technologies and new or innovative services. Any preference for incumbents would unfairly tilt the scales against new entrants.

V. NO INCUMBENT PREFERENCE SHOULD BE APPLIED TO THE 800 MHZ GUARD BAND

Similarly, no incumbent preference should be applied to the 800 MHz GB frequencies. The 800 MHz GB spectrum is in the General Pool, which means eligible users include non-cellular SMR providers as well as Public Safety licensees and I/B Pool eligibles. As with the EB SMR channels, the incumbent preference would thus unjustifiably favor incumbent carriers at

swiftly as possible. It is vital that the frequency spectrum made available for this purpose be put to use without delay in order to serve the public needs for mobile radiotelephone and for limited dispatch service.”); *AWS-4 Order* at 16176 ¶ 193 (2012) (adopting requirements “to foster timely deployment of flexible terrestrial mobile service.”); Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd. 8064, 8225 (2007) (“[a] license to use the people’s airwaves is a public trust--and we must not countenance ... any unreasonable delay in putting this spectrum to work.”); Amendment of Part 27 of the Commission’s Rules to Govern the Operation of Wireless Communications Services in the 2.3 GHz Band, *Order on Reconsideration*, 27 FCC Rcd. 13651, 13699 ¶ 119 (2012) (the public interest is “in putting [spectrum] to its highest and best use without delay.”); Northstar Technology Request for Waiver, 19 FCC Rcd. 22275, 22278 ¶ 6 (2004).

¹⁶ *NPRM*, 31 FCC Rcd. at 9442, ¶ 33.

the expense of new entrants – the heart of the competition-focused concern that counsels against such set-asides.

VI. AN INCUMBENT PREFERENCE IS SIMILARLY INAPPROPRIATE FOR THE I/B PORTION OF EB FREQUENCIES

The *NPRM* proposes to adopt an incumbent preference in part. It would provide a window for incumbent 800 MHz licensees in the market to acquire or expand coverage on EB I/B Pool channels before accepting applications from new entrants.¹⁷ But there are no compelling benefits to justify a discriminatory preference for incumbents that would cut against the grain of the Commission’s spectrum policy. The one justification cited for this preference is that “[i]ncumbent 800 MHz licensees already have deployed facilities and demonstrated a commitment to utilizing the band in a given band and are unlikely to acquire spectrum for other than operational purposes and can be expected to put additional channels into service promptly to meet existing operational needs.” But this appears to be a self-perpetuating justification for limiting all spectrum to incumbent use.

It is moreover contradicted by the evidence of low and inefficient use – or total disuse – of the spectrum in question by the incumbents who would gain the preference. These inefficiencies are themselves partly due to the antiquated systems that some of them have deployed. While changes in digital technology are capable of effectively doubling the bandwidth that these incumbents’ frequencies can yield, many of them have chosen to maintain their out-of-date analog systems rather than upgrade to state-of-the-art digital systems. The exclusive window would send the wrong signal by encouraging continued use of such inefficient systems, not the opposite.

¹⁷ *Id.* at 9441-42 ¶ 31.

Nor do these incumbents appear to have a burning need for additional spectrum. In response to the LMCC rulemaking petition, none of them filed comments substantiating such a need.

Furthermore, as the *NPRM* notes, it is not clear how an incumbent preference would be carried out.¹⁸ There is no rule language proposed in the *NRPM*.¹⁹ And it is also not clear which licensees would even be considered incumbents. These uncertainties make an incumbent preference all the more vulnerable to challenges.

Finally, the I/B channels themselves can be converted to SMR use,²⁰ making an incumbent preference also inappropriate for the same reasons applicable to the SMR EB and the General Pool GB frequencies.

Indeed, many of these problems with an incumbent preference have been noted by none other than the lead advocate for LMCC, the Enterprise Wireless Association (“EWA”). According to EWA, similar preferences have proven ineffective in the past.²¹ In the context of the three-year exclusive right for public-safety entities to Sprint-vacated spectrum, EWA noted that the preference should be re-examined in light of technology advances, the need for spectrum efficiencies, and the spectrum shortages that exist for other deserving classes of PLMR licensees.²² The sentiment expressed by EWA there is correct here – the lengthy reservations resulting from incumbent preferences do not serve the public interest and have operated to cause spectrum to lie fallow for far too long.

¹⁸ *Id.* at 9443 ¶ 35.

¹⁹ *Id.*

²⁰ 47 C.F.R. § 90.621(e)(2).

²¹ Comments of the Enterprise Wireless Alliance, FCC File No. 0007352620, at 3-4 (Oct. 24, 2016).

²² *Id.*

VII. CONCLUSION

The Commission should move to issue public notices releasing the EB/GB frequency channels for assignment where available without any further delay while rejecting preferences for incumbent licensees.

Respectfully submitted,

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